MEMORANDUM

Agenda Item No.

8(R)3(A)



Date:

June 26, 2007

To:

Honorable Chairman Bruno A. Barreiro

and Members, Board of County Commissioners

From:

George M. Burges

County Manager

Subject:

Request to Advertise for South District Wastewater Treatment Plant, HLD Upgrade to 285 MGD,

Oxygenation Train No. 7 - Project No. N/A; Contract No. S-816

Recommendation

This Request to Advertise for Construction Contract No. S-816 has been prepared by the Miami-Dade Water and Sewer Department (MDWASD) and is recommended for approval pursuant to Sections 2-8.1 of the Code of Miami-Dade County. This project is one in a series of projects under the High Level Disinfection (HLD) Program to comply with Consent Order No. 03-1376 negotiated by Miami-Dade County and the Florida Department of Environmental Protection (FDEP) and to meet regulatory requirements resulting from a rule change implemented by the US Environmental Protection Agency (USEPA) to meet effluent quality standards for deep well disposal. Upon the completion of the entire project, the South District Wastewater Treatment Plant (SDWWTP) will be rated at 285 million gallons per day (MGD), a chart is attached showing the different upgrades that make-up the HLD Facility.

Scope

PROJECT NAME:

South District Wastewater Treatment Plant, HLD Upgrade to 285 MGD,

Oxygenation Train No. 7

PROJECT NO:

N/A

CONTRACT NO:

S-816

PROJECT DESCRIPTION: The project consists of constructing an enclosed concrete structure of approximately 2,200 square feet in an area 14 feet high for the Oxygenation Train No. 7, and an adjoining concrete channel and flow controls with an approximate area of 1,700 square feet at the SDWWTP.

> The project also includes, but is not limited to the following: furnishing and installing all piping, fittings, valves, and accessories; sluice and slide gates for the channel; two blowers with intake and discharge silencers to reduce noise, piping, valves, and accessories for a diffuser system; connect blower with piping, fittings, valves, and associated accessories; and twelve aerators. Also, as part of the work is making connections to existing yard piping; site lighting; electrical work; concrete stairs and railing; cleaning and testing piping and equipment; coating of exterior and interior of structure; landscaping; restoration work of site, except paving (which will be done under a separate contract); and all other appurtenant and miscellaneous items and work for a complete, functional and satisfactory project.

It is MDWASD's intent to obtain a complete functional, and satisfactory installation under this project, and any items of labor, equipment or materials which may be reasonably assumed as necessary to accomplish this end shall be supplied whether or not they are specifically shown on the plans or stated in the specifications. The contractor shall provide all sheeting, shoring, bracing and all other labor, material or equipment required to preclude damage to, or loss of functionality of, any existing facility or system.

PROJECT LOCATION:

23300 SW 88 Avenue, Miami-Dade County, Florida

PRIMARY COMMISSION

DISTRICT:

District 8

Katy Sorenson

APPROVAL PATH:

Board of County Commissioners

USING DEPARTMENT:

Miami-Dade Water and Sewer Department

MANAGING DEPARTMENT: Miami-Dade Water and Sewer Department

Fiscal Impact / Funding Source

FUNDING SOURCE:

SOURCE

AMOUNT

\$11,700,000.00

WASD Revenue Bonds Sold and Wastewater Connection

Charges

PTP FUNDING:

No

GOB FUNDING:

No

CAPITAL BUDGET

PROJECT:

BUDGET PROJECT / DESCRIPTION

\$11,700,000.00

96510240-SOUTH DISTRICT WASTEWATER TREATMENT

PLANT - HIGH LEVEL DISINFECTION,

Page 310, Volume 3, Funding Year 2006-2007

PROJECT TECHNICAL CERTIFICATION

REQUIREMENTS:

One of the following licenses is required: General Engineering, General Contractor, and/or other categories as applicable by Chapter 489 of the

Florida Statutes or Chapter 10 of Miami-Dade County Code.

ESTIMATED CONTRACT

PERIOD:

730

Consecutive Calendar Days

ESTIMATED CONTINGENCY

PERIOD:

73

IG FEE INCLUDED IN BASE Yes

CONTRACT:

ART IN PUBLIC PLACES:

No

BASE ESTIMATE:

\$10,390,000.00

CONTINGENCY

ALLOWANCE (SECTION 2-8.1 MIAMI DADE COUNTY

CODE):

TYPE

PERCENT AMOUNT

COMMENT

Infrastructure 10%

\$1,039,000.00

PERMIT FEES:

\$271,000.00

2.60%

TOTAL DEDICATED

ALLOWANCE:

\$271,000.00

COST ESTIMATE:

\$11,700,000.00

Track Record / Monitor

EXPLANATION:

Upgrade the South District Wastewater Treatment Plant to 285 MGD.

MINIMUM QUALIFICATIONS No.

EXCEED LEGAL REQUIREMENTS:

REVIEW COMMITTEE:

MEETING DATE: 4/11/2007 SIGNOFF DATE:

RESPONSIBLE WAGES:

Yes

REVIEW COMMITTEE

ASSIGNED CONTRACT

MEASURE GOAL

COMMENT

MEASURES:

CSBE

12.00%

CWF

0.00% Not Applicable

MANDATORY CLEARING

HOUSE:

Yes

CONTRACT MANAGER

NAME/PHONE/EMAIL:

John W. Chorlog, Jr.

(786) 552-8102

iwcho01@miamidade.gov

PROJECT MANAGER

NAME/PHONE/EMAIL:

Alma M. Santiago, P.E. (786)552-8243

AS1@miamidade.gov

Background

BACKGROUND:

The project consists of constructing an enclosed concrete structure of approximately 2,200 square feet for Oxygenation Train No. 7, and an adjoining concrete channel and flow controls with an approximate area of 1,700 square feet at the SDWWTP. This is one in a series of projects under the HLD Program to comply with Consent Order No. 03-1376 negotiated by Miami-Dade County and FDEP and to meet regulatory requirements resulting from a rule change implemented by the USEPA to meet effluent quality standards for deep well disposal. Upon the completion of the entire project, the SDWWTP will be rated as a 285 MGD plant.

BUDGET APPROVAL FUNDS AVAILABLE:	OSBM DIRECTOR	S-29-67 ACCEPTED DATE	95
APPROVED AS TO LEGAL SUFFICIENCY:	COUNTY ATTORNEY	S/23/27 ACCEPTED	
	ASSISTANT COUNTY MANAGER	ACCEPTED ACCEPTED	
CLERK DATE	DATE		

SOUTH DISTRICT WASTEWATER TREATMENT PLANT, HLD UPGRADE TO 285 MGD, OXYGENATION TRAIN NO. 7

CONTRACT NO: S-816

BUDGET PROJECT AND DESCRIPTION:	96510240-SOUTH DISTRICT WASTEWATER TREATMENT PLANT - HIGH LEVEL DISINFECTION
FUNDING SOURCE:	WASD REVENUE BONDS SOLD AND WASTEWATER CONNECTION CHARGES
INDEX CODES:	S047650
ASSISTANT DIRECTOR, ENGINEERING AND CAPITAL IMPROVEMENTS:	EDUARDO A. VEGA, PE DATE
BUDGET AND CAPITAL FUNDING COORDINATION:	Lech. Vole 5/14/07
	PEDRO VELAR DATE
ASSISTANT DIRECTOR, FINANCE AND INFORMATION TECHNOLOGY:	Drano Devecho 5/14/07
	DIANE CAMACHO DATE
DEPUTY DIRECTOR, REGULATORY COMPLIANCE AND	

CAPITAL IMPROVEMENTS:

51,000

95,000

DEPARTMENT:

TOTAL EXPENDITURES:

Water and Sewer

SOUTH DISTRICT WASTEWATER TREATMENT					•			PROJECT	# 965102
DESCRIPTION: Construct treatment facilities for LOCATION: 8950 SW 232 St	nign ievei ais	sintection to m	eet regulator	y requirement	S				
LOCATION: 8950 SW 232 St Unincorporated Miami-Da	ido County								*:
ESTIMATED ANNUAL OPERATING IMPAC	•			DISTRICT LO		8 Systemwide			
REVENUE SCHEDULE:				• •				FITTIEF	707
	PRIOR	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	FUTURE	TOT
Wastewater Connection Charges	28,220	3,838	19,883	16,902	11,361	2,570	0	0.	82,7
State Revolving Loan Wastewater Program	0	0	0	55,000	45,000	0	0	0	100,0
WASD Revenue Bonds Sold	94,462	0	0	0	0	0	0	0	94,4
Future WASD Revenue Bonds	0	0	. 0	223,702	0	0	0	4,600	228,3
TOTAL REVENUE:	122,682	3,838	19,883	295,604	56,361	2,570	0	4,600	505,\$
EXPENDITURE SCHEDULE:	PRIOR	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	FUTURE	TOT
lanning and Design	1,511	1,685	9,868	18,005	13,553	959	0	419	46,0
Construction	15,091	16,830	98,587	179,870	135,399	9,580	0	4,181	459,5
OTAL EXPENDITURES:	16,602	18,515	108,455	197,875	148,952	10,539	0	4,600	505,5
OTAL EXPENDITURES: OUTH DISTRICT WASTEWATER TREATMENT F	·	•	ŕ	197,875	148,952	10,539	0	4,600 PROJECT	
OUTH DISTRICT WASTEWATER TREATMENT F	PLANT EXPA	NSION - PH	ASE III	·		10,539	0	,	
OUTH DISTRICT WASTEWATER TREATMENT F	PLANT EXPA	NSION - PH	ASE III	·		10,539	0	,	
OUTH DISTRICT WASTEWATER TREATMENT FESCRIPTION: Expand the South District Wastew	PLANT EXPA	NSION - PH	ASE III lls; and insta	·	generators	10,539	0	,	
OUTH DISTRICT WASTEWATER TREATMENT F ESCRIPTION: Expand the South District Wastew LOCATION: 8950 SW 232 St	PLANT EXPA vater Plant an	NSION - PH	ASE III ells; and insta	ll emergency (generators CATED:	·	0	,	
OUTH DISTRICT WASTEWATER TREATMENT F ESCRIPTION: Expand the South District Wastew LOCATION: 8950 SW 232 St Unincorporated Miami-Dade ESTIMATED ANNUAL OPERATING IMPACT:	PLANT EXPA vater Plant an	NSION - PH	ASE III ells; and insta	Il emergency o	generators CATED:	8	2011-12	,	‡ 96554
OUTH DISTRICT WASTEWATER TREATMENT F ESCRIPTION: Expand the South District Wastew LOCATION: 8950 SW 232 St Unincorporated Miami-Dade ESTIMATED ANNUAL OPERATING IMPACT: EVENUE SCHEDULE:	PLANT EXPA vater Plant and e County Minimal PRIOR	ANSION - PH/ ad injection we	ASE III ASE III IIIs; and insta I	II emergency of the control of the c	generators CATED: SERVED: 2009-10	8 Systemwide		PROJECT	# 96554 TOT
OUTH DISTRICT WASTEWATER TREATMENT F ESCRIPTION: Expand the South District Wastew LOCATION: 8950 SW 232 St Unincorporated Miami-Dade	PLANT EXPA vater Plant an e County Minimal	ANSION - PHA d injection we 2006-07	ASE III Ills; and insta ((2007-08	II emergency of the control of the c	generators CATED: SERVED:	8 Systemwide 2010-11	2011-12	PROJECT #	TOT. 14,00
OUTH DISTRICT WASTEWATER TREATMENT F ESCRIPTION: Expand the South District Wastew LOCATION: 8950 SW 232 St Unincorporated Miami-Dade ESTIMATED ANNUAL OPERATING IMPACT: EVENUE SCHEDULE: astewater Connection Charges ture WASD Revenue Bonds	PLANT EXPA vater Plant and e County Minimal PRIOR 7,000	ANSION - PHA d injection we 2006-07 0	ASE III IIIs; and insta I I I 2007-08	il emergency of the control of the c	generators CATED: SERVED: 2009-10 1,000	8 Systemwide 2010-11 3,000	2011-12 2,000	PROJECT # FUTURE 0	TOTA 14,00 81,00
OUTH DISTRICT WASTEWATER TREATMENT F ESCRIPTION: Expand the South District Wastew LOCATION: 8950 SW 232 St Unincorporated Miami-Dade ESTIMATED ANNUAL OPERATING IMPACT: EVENUE SCHEDULE: astewater Connection Charges ature WASD Revenue Bonds	PLANT EXPA rater Plant and e County Minimal PRIOR 7,000 0	ANSION - PHA d injection we 2006-07 0 0	ASE III Ills; and insta (2007-08 0 0	DISTRICT LODISTRICT(s) S 2008-09 1,000 0	generators CATED: SERVED: 2009-10 1,000 0	8 Systemwide 2010-11 3,000 0	2011-12 2,000 60,000	PROJECT # FUTURE 0 21,000	
OUTH DISTRICT WASTEWATER TREATMENT F ESCRIPTION: Expand the South District Wastew LOCATION: 8950 SW 232 St Unincorporated Miami-Dade ESTIMATED ANNUAL OPERATING IMPACT: EVENUE SCHEDULE: astewater Connection Charges	PLANT EXPArater Plant and e County Minimal PRIOR 7,000 0	2006-07 0	ASE III Ills; and insta 2007-08 0 0	DISTRICT LODISTRICT(s) S 2008-09 1,000 0	generators CATED: SERVED: 2009-10 1,000 0	8 Systemwide 2010-11 3,000 0	2011-12 2,000 60,000	FUTURE 0 21,000 21,000	TOT. 14,00 81,00

1,500

3,500

7,000

32,000

MIAMI-D E WATER AND SEWER DEPARTMENT Projection by Project Sub-project by Year - Wastewater As of: 9/30/2005

			1			
			Current Bond/Fund	Expenditures As of	Remaining Band/Fund	PROJECTIONS
L L	Sub-Pro	Sub-Proj Sub-Proj Description	Allocation	· •	Allocation	111.2017 2017 2017 2017 2017 2017
1036	101665	SDWWTP - I MGD COASTAL WETLANDS REHYDRATION	000,009,0	0	000,009,8	100,000 1,000,000 5,500,000 0 0 0 0 0 0 0 0 0 0 0
	101671	20,000 GPD WELLFIELD RECHARGE	1,025,000	0	1,025,000	ç
		TOTAL - 1036	23,013,980	13,782	23,000,198	277231 6287907 16 434 mil
1037	101527	SDWWTP - EFFLUENT DISPOSAL WELLS - ONSITE	4,988,353	38,353	4,950,000	50,000 100,000 200,000 0 0 0 0 0 0 0 0 4,500,000 4,550,000
	101618	SDWWTP - DEEP BED SAND FILTERS	125,386,725	0	125,386,725	0 2205/662 38 431/865 501 H A70 38 431 8A8 5 706 2A21
	101619	SDWWTP - FINAL CLARIFIERS AND INTERIM IMPROVEMENTS	83,905,674	0	83,905,674	0 0 15,802,856 37,315,399 28,340,681 1,846,738 0 0 0 83,905,674
	101620	SDWWTP - PROCESS CONTROLS AND INSTRUMENTATION	1,522,750	0	1,522,750	0 0 286.796 677,213 525.226 33,515 0 0 0 0 1,522.750
	101621	SDWWTP - DISINFECTION FACILITIES/CHLORINE TANKS	114,266,550	0	114,266,550	0 21,221,044 50,817,804 39,412,731 2,614,971 0 0 0 114,266,550
_	101622	SDWWTP - YARD PIPING	12,066,162	0	12,066,162	0 2272,550 \$.386(188 4,161.83) 265,573 h
7	101623	SDWWTP - ELECTRICAL SERVICE/GENERATORS	34,164,129	0	34,164,129	0 6,434,497 15,193,825 11,783,865 75,542 0 0 0 34,164,129
	101624	SDWWTP - LOW LIFT TRANSFER PUMP STATION	26,300,613	0	26,300,613	0 - 0 4953.477 11.656.681 9,071.587 578.868 0 0 0 26,300,613
	101625	SDWWTP - FINAL SITE PAVING, GRADING AND DRAINAGE	2,936,904		2,936,904	0 0 2,936,904
	101627	SDWWTP - SLUDGE HANDLING IMPROVEMENTS	10,475,134	0	10,475,134	- 0 (1,972,895 4,658,610 3,613,075 220,554 0 0 0 0 10,475,134
	101636	SDWWTP - DESIGN AND ENGINEERING SERVICES	59,803,646	6,029,329	53,774,317	10,484,063 16,209,077 13,428,545 7514,104 4,746,350 1,392,178 0
	101669	OXYGENATION PROCESS TRAIN 7	11,231,183	0	11,231,183	0 21115,289 4,994,848 3,873,851 2471195
	101670	EFFLUENT PUMP SYSTEM	18,490,186	0	18,490,186	0 0 3482,455 8,223,147 6,377,621 406,969 0 0 0 0 18,406,186
		TOTAL - 1037 TOTAL - Wastemater	505,538,009 2,159,736,208	6,067,682 122,564,633 2	499,470,327 2,037,171,575	499,470,327 10534,063 18,514,739 108,455,408 197,875,619 148,951,698 10,338,800 0 0 0 4,600,000 499,470,327 2,037,171,575 76,529,885 122,103,544 235,834,145 296,366,522 292,883,251 118,800,613 196,488,908 204,168,757 178,850,809 315,175,142 2,037,171,576

Prepared by Capital Planning Page 8 of 8 Projection by Proj/Sub by Year Report A or F Sewer All Summary

19-Sey



Dept. of Business Development

Project Worksheet

Project/Contract Title:	SOUTH DISTRICT WASTER	WATER TREATM	IENT PLANT, OXYGEN	NATION	RC Date:	04/11/20
Project/Contract No:	TRAIN NO. 7 (SIC 15) S-816		.		T	3
Department:	WATER & SEWER DEPARTA	ÆNIT	Funding Source: ER-47650		Item No:	
Estimated Cost of Project/Bid:		ALCIN I	EK-4/030	Res	ubmittal Date(s):
Description of Project/Bid:	THE PROJECT CONSISTS OF CONST. SQUARE FEET IN AREA BY 14 FEET FLUME (CHANNEL) AND WEIR STRICT WASTE WATER TREATMING TO COMPLY WITH A CONSENT DEC	HIGH FOR THE OXYOUCTURE WITH AN AP ENT PLANT, LOCATE A SERIES OF PROJECT	GENATION TRAIN NO. 7, AND PROXIMATE AREA OF 1,700 DAT 23300 SW 88TH AVENU IS UNDER THE HIGH LEVEL	RE OF APPROXIMA D AN ADJOINING (SQUARE FEET AT E, IN MIAMI-DADI DISINFECTION (H	ATELY 2,200 CONCRETE THE SOUTH E COUNTY, (LD) PROGRAM	
	e de la company	ersures Recomm	ndation 💮 🕡		4.5	
	<u>Measure</u>	Program	Goal Percent			
	Goal	CSBE	12.40%			
	Reason	Mora Recommend.	tion			
An analysis of the factors of demolition, clearing and grand guardrail (highway and	ontained in Section VI C of A.O. ubbing and drainage (all other heastreet construction).	3-22 indicate that a avy construction), p	a goal is appropriate in the	e trades of excavical, compact fil	vation, l & paving,	
CWP Not Applicable: Not i	n DTA	:				erraber and a second
	Atellysis for	Con mendation	of a Goal	% of Items		
<u>Subtrade</u>		<u>Cat.</u>	Estimated Value	to Base Bid	Availability	
Excavation Contractors		CSBE	\$198,900.00	1.70%	23	
Wrecking and Demolition C	ontractors	CSBE	\$4,914.00	0.04%	- 11	
All Other Heavy Construction	on	CSBE	\$24,570.00	0.21%	15	
Plumbing, Heating, and Air-	Conditioning Contractors	CSBE	\$299,520.00	2.56%	24	
Painting and Wall Covering	Contractors	CSBE	\$59,670.00	0.51%	35	
Electrical Contractors		CSBE	\$398,970.00	3.41%	42	
Highway and Street Construc	etion	CSBE	\$464,490.00	3.97%	23	
		Total	\$1,451,034.00	12.40%		
iving Wages: YES Esponsible Wages: YES X	NO X Highway NO Building:	<u></u>		iction: YES	NO X	
rdinance 90-143 is applicable to all	construction projects over \$100,000	that do not utilize Fed	leral Funds			
	ADVIDW COM	TREEBSKECOVIV	ENDALION			
Tier 1 Set Aside					PRESTALIA	
i	Level 1				i	
Trade Set Aside (MCC)		_ Goal 129	CSBE Bid	Preference		
No Measure			Sele		-	
Userel 1	clause 4/1	1/2			Harmi () publication	

